### **PCT**

REC'D 1 5 MAY 2001

# INTERNATIONAL PRELIMINARY EXAMINATION REPO

(PCT Article 36 and Rule 70)

| /940/JB   |  | FOR FURTHER ACTION   | See Notification of Transmittal of International R ACTION Preliminary Examination Report (Form PCT/IPEA/416)               |  |  |
|---|--|--|--|--|--|
|   |  |  |  |  |  |
|   | application No.  | International filing date (day/month   |  |  |  |
| PCT/US0   |  | 08/02/2000   | 08/02/1999   |  |  |
| Internationa<br>C11D3/3   |  | or national classification and IPC   |  |  |  |
| Applicant   |  |  |  |  |  |
| THE PRO   | OCTER & GAMBLE CO  | MPANY et al.   |  |  |  |
| 1. This in and is   | nternational preliminary ex<br>transmitted to the applica                        | camination report has been prepared ant according to Article 36.   | d by this International Preliminary Examining Authority  |  |  |
| 2. This F   | REPORT consists of a total   | al of 5 sheets, including this cover s   | heet.  |  |  |
| b<br>(s   | een amended and are the  | basis for this report and/or sheets on 607 of the Administrative Instruction   | ne description, claims and/or drawings which have containing rectifications made before this Authority ons under the PCT). |  |  |
| 3. This r   | ☐ Basis of the report  | relating to the following items:   |  |  |  |
| II  | ☐ Priority   | e de la constanta de la consta | and industrial applicability   |  |  |
| 111   |  |  | ventive step and industrial applicability  |  |  |
| IV<br>V   | ☐ Reasoned stateme   | ack of unity of invention easoned at the case of the c |  |  |  |
| . VI  | ⊠ Certain documents  | sicted   | •  |  |  |
| VII   | ☑ Certain defects in t   | he international application   |  |  |  |
| VIII  | ⊠ Certain observation  | ns on the international application  |  |  |  |
| Date of sub   | mission of the demand  | Date of  | completion of this report  |  |  |
| 17/07/2000  |  | 11.05.2  | 0001   |  |  |
|   | mailing address of the interna<br>examining authority:<br>European Patent Office | tional Authori   | zed officer  |  |  |
| D-80298 Munich  |  |  | enstein, H   |  |  |
| Tel. +49 89 2399 - 0 Tx: 523656 epmu d<br>Fax: +49 89 2399 - 4465 |  |  | one No. +49.89 2399 8217   |  |  |



## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/03227

| l. | Bas   | is fth   | report                      |  |  |  |
|----|-------|--|-----------------------------|--|--|--|
| 1. | the i | receiving<br>are not   | a Office in r               | nents of the international application (Replacement sheets which have been furnished to response to an invitation under Article 14 are referred to in this report as "originally filed" this report since they do not contain amendments (Rules 70.16 and 70.17)): |  |  |
|    | 1-17  | 7  |                             | as originally filed  |  |  |
|    | Clai  | ms, No.  | . <b>:</b>                  |  |  |  |
|    | 1.0   |  |                             | as originally filed  |  |  |
|    | 1-9   |  |                             | as originally filed  |  |  |
| _  |       |  | 4 - 4b - 1a-a               | ware all the elements marked above were evallable or furnished to this Authority in the  |  |  |
| 2. | lang  | regard<br>Juage in   | which the i                 | uage, all the elements marked above were available or furnished to this Authority in the nternational application was filed, unless otherwise indicated under this item.   |  |  |
|    | The   | se elem  | ents were a                 | vailable or furnished to this Authority in the following language: , which is:   |  |  |
|    |       |  | -                           | ranslation furnished for the purposes of the international search (under Rule 23.1(b)).  |  |  |
|    |       | •  |                             | blication of the international application (under Rule 48.3(b)).   |  |  |
|    |       |  | guage of a t<br>d/or 55.3). | ranslation furnished for the purposes of international preliminary examination (under Rule   |  |  |
| 3. |       |  |                             | leotide and/or amino acid sequence disclosed in the international application, the y examination was carried out on the basis of the sequence listing:   |  |  |
|    |       | contain  | ed in the in                | ternational application in written form.   |  |  |
|    |       | filed tog  | gether with t               | the international application in computer readable form.   |  |  |
|    |       | ☐ furnished subsequently to this Authority in written form.  |                             |  |  |  |
|    |       | ☐ furnished subsequently to this Authority in computer readable form.  |                             |  |  |  |
|    |       | ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. |                             |  |  |  |
|    |       |  | itement that<br>has been fu | t the information recorded in computer readable form is identical to the written sequence rnished.   |  |  |
| 4. | The   | amendi   | ments have                  | resulted in the cancellation of:   |  |  |
|    |       | the des  | cription,                   | pages:   |  |  |
|    |       | the clai   | ·                           | Nos.:  |  |  |
|    |       | the dra  | wings,                      | sheets:  |  |  |
| 5. |       | This re  | port has be                 | en established as if (some of) the amendments had not been made, since they have been  |  |  |

considered to go beyond the disclosure as filed (Rule 70.2(c)):



(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

- 6. Additional observations, if necessary:
- V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- 1. Statement

Novelty (N)

Yes: No:

Claims

Claims 1-9

Inventive step (IS)

Yes:

Yes:

Claims

No: Claims 1-9

Industrial applicability (IA)

Claims 1-9

No: Claims

- 2. Citations and explanations see separate sheet
- VI. Certain documents cited
- 1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

see separate sheet

#### VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted: see separate sheet

#### VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made: see separate sheet

#### Re Item V

- WO-A-9828393 (examples 1E,F, 2F,H,J, claims, pages 36-37), cited in the 1) application exemplifies liquid manual dishwashing compositions comprising amylase, suds booster and diamine. The pH is 8-12. Thus the subject-matter of claims 1-9 is not novel.
- WO-A-9732961(examples 15-16,8 page 51) and WO-A-9901531 (examples 4,6, 2) page 50) exemplify liquid manual dishwashing compositions comprising amylase, suds booster and grease removal agents (Mg2+, surfactant, ethanol). The pH is 9.1-10-11.7. Thus the subject-matter of claims 1-3,6,8-9 is not novel.

#### Re Item VI

#### Certain published documents (Rule 70.10)

| Application No | Publication date | Filing date      | Priority date (valid claim) |  |
|----------------|------------------|------------------|-----------------------------|--|
| Patent No      | (day/month/year) | (day/month/year) | (day/month/year)            |  |
|                |                  |                  |                             |  |
| WO-A-9927054   | 3.6.99           | 20.11.98         |                             |  |
|                | 21.11.97         |                  | •                           |  |

WO (tables II,IV,V, claims, page 38) describes the subject-matter of claims 1-9.

#### Re Item VII

The application and serial numbers on pages 3,4,8,10,14,16 should be substituted 1) by the publication numbers.

#### Re Item VIII

Claim 1 does not meet the requirements of Article 6 PCT in that the matter for 1) which protection is sought is not clearly defined. By the terms suds booster and greasy soil removal the claim attempts to define the subject-matter in terms of the result to be achieved which merely amounts to a statement of the underlying problem. The technical features necessary for achieving this result should be

added, see e.g. pages 10,13,14.

- The term suds booster in claim 1 is not clear. According to page 14 it is a suds 2) stabilizing surfactant or suds stabilizer.
- It is clear from page 7 that 5-90% surfactant should be present. Since 3) independent claim 1 does not contain this feature it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.
- Claim 5 can only be dependent on claim 4. 4) Claim 7 can only be dependent on claims 4-5.
- The term Jeffamine EDR in claim 7 and appearing to be a registered trade mark 5) or trade name has no precise meaning as it is not internationally accepted as a standard descriptive term, thereby rendering the definition of the subject-matter of this claim unclear, a more precise term from e.g. page 12 should be added.
- According to pages 8-9 the term amphoteric relates preferably to amine oxide 6) surfactants. However, they are not amphoteric; they are usually regarded as semi polar surfactants or nonionic surfactants. Thus claim 7 is not clear.



#### **INTERNATIONAL SEARCH REPORT**

(PCT Article 18 and Rules 43 and 44)

| Applicant's or agent's file reference FOR FURTHER see Notification of Transmittal of International Search Report                             |   |  |  |  |
|--|---|--|--|--|
| 7940/JB  | ACTION  | 20) as well as, where applicable, item 5 below.    |  |  |
| International application No.  | International filing date (day/month/year)  | (Earliest) Priority Date (day/month/year)          |  |  |
| PCT/US 00/03227  | 08/02/2000  | 08/02/1999   |  |  |
| Applicant  |   |  |  |  |
|  |   |  |  |  |
| THE PROCTER & GAMBLE COMPA   | ANY et al.  |  |  |  |
|  |   |  |  |  |
| This International Search Report has been according to Article 18. A copy is being tra   | n prepared by this International Searching Auth<br>Insmitted to the International Bureau.             | ority and is transmitted to the applicant          |  |  |
|  |   | •  |  |  |
| This International Search Report consists  |   |  |  |  |
| It is also accompanied by  | a copy of each prior art document cited in this   | report.  |  |  |
| Basis of the report  |   |  |  |  |
| With regard to the language, the illinguage in which it was filed, unle  | nternational search was carried out on the bases otherwise indicated under this item.                 | is of the international application in the         |  |  |
| the international search was Authority (Rule 23.1(b)).   | as carried out on the basis of a translation of the   | ne international application furnished to this     |  |  |
| b. With regard to any <b>nucleotide and</b> was carried out on the basis of the  | d/or amino acid sequence disclosed in the in  | ternational application, the international search  |  |  |
| · —  | nal application in written form.  | •  |  |  |
| filed together with the inter  | rnational application in computer readable form   | 1.   |  |  |
| furnished subsequently to  | this Authority in written form.   |  |  |  |
| furnished subsequently to  | this Authority in computer readble form.  |  |  |  |
| the statement that the sub<br>international application as   | sequently furnished written sequence listing do<br>s filed has been furnished.                        | bes not go beyond the disclosure in the            |  |  |
| the statement that the info<br>furnished   | rmation recorded in computer readable form is   | identical to the written sequence listing has been |  |  |
| 2. Certain claims were four  | nd unsearchable (See Box I).  |  |  |  |
| 3. Unity of invention is lack  | king (see Box II).  |  |  |  |
| 4. With regard to the title,   |   |  |  |  |
| X the text is approved as sul  | omitted by the applicant  |  |  |  |
|  | ned by this Authority to read as follows:   |  |  |  |
|  |   |  |  |  |
|  |   |  |  |  |
| 5 With regard to the shatuset  |   |  |  |  |
| 5. With regard to the abstract, the text is approved as sub-   | omitted by the applicant  |  |  |  |
| the text has been establish  | ned, according to Rule 38.2(b), by this Authority<br>date of mailing of this international search rep |  |  |  |
|  | •   | or, submit comments to this Authority.             |  |  |
| 6. The figure of the <b>drawings</b> to be published with the abstract is Figure No.  As suggested by the applicant.  X None of the figures. |   |  |  |  |
| because the applicant failed to suggest a figure.  |   |  |  |  |
|  | characterizes the invention.  |  |  |  |
|  |   |  |  |  |

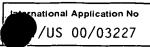


sternational application No.

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

| Liquid dishwashin | a detergent compo | sition containing  | one or more amylass   | 2            |
|-------------------|-------------------|--------------------|---|--------------|
| enzymes and a sud | s booster which e | xhibits excellent  | one or more amylase<br>greasy soil removal<br>than about 8. | <i>=</i><br> |
| performance and a | re either of a hi | gh pH of greater t | han about 8.  | '            |
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|                   |                   |                    |   |              |

#### INTERNATIONAL SEARCH REPORT



A. CLASSIFICATION OF SUBJECT MAITER IPC 7 C11D3/386 C11D3/30

| According to International Pate | ∍nt Classification (IPC) o | r to both national | classification and II | PC |
|---------------------------------|----------------------------|--------------------|-----------------------|----|
|                                 |                            |                    | <del></del>           |    |

#### **B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| X          | WO 98 28393 A (PROCTER & GAMBLE) 2 July 1998 (1998-07-02) cited in the application page 36 -page 37; claims; examples 1,2 | 1-9                   |
| X          | WO 97 32961 A (PROCTER & GAMBLE) 12 September 1997 (1997-09-12) page 51; examples 15-16,8                                 | 1-3,6,8,              |
| X          | WO 99 01531 A (PROCTER & GAMBLE) 14 January 1999 (1999-01-14) page 50; examples 4,6                                       | 1-3,6,8,              |
| P,X        | WO 99 27054 A (PROCTER & GAMBLE) 3 June 1999 (1999-06-03) page 38; claims; tables II,IV,V                                 | 1-9                   |

| Further documents are listed in the continuation of box C.  | Patent family members are listed in annex.   |  |  |
|---|--|--|--|
| "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier document but published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled |  |  |
| "P" document published prior to the international filing date but<br>later than the priority date claimed   | in the art. "&" document member of the same patent family  |  |  |
| Date of the actual completion of the international search   | Date of mailing of the international search report   |  |  |
| 8 June 2000   | 19/06/2000   |  |  |
| Name and mailing address of the ISA   | Authorized officer   |  |  |
| European Patent Office, P.B. 5818 Patentlaan 2<br>NL – 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,<br>Fax: (+31-70) 340-3016   | Pfannenstein, H  |  |  |

#### INTERNATIONAL SEARCH REPORT

03-06-1999

WO 9901531 A 14-01-1999

WO 9927054 A

tion on patent family members /US 00/03227 Patent family Patent document Publication Publication cited in search report date member(s) date 02-07-1998 WO 9828393 Α US 5990065 A 23-11-1999 ΑU 5379598 A 17-07-1998 ΕP 0946703 A 06-10-1999 PL334376 A 28-02-2000 WO 9732961 Α 12-09-1997 BR 9707951 A 27-07-1999 CA2247501 A 12-09-1997 CN 1217742 A 26-05-1999

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NONE

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national Application No

23-12-1998

25-01-1999

26-04-2000